

### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)  
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

\*\*\*\*\* HHHHHHHH SSSSSSS?

### Status: Signing onto Dialog

\*\*\*\*\*

ENTER PASSWORD:

\*\*\*\*\* HHHHHHHH SSSSSSS? \*\*\*\*\*

Welcome to DIALOG

### Status: Connected

Dialog level 02.05.06D

Last logoff: 13may02 09:15:29

Logon file001 15may02 10:32:54

\*\*\* ANNOUNCEMENT \*\*\*

\*\*\*

--U.S. Patents Fulltext (File 654) has been redesigned with  
new search and display features. See HELP NEWS 654 for  
information.

\*\*\*

--Dialog NewsRoom is now available. BEGIN NEWSROOM  
to use the files in a OneSearch. See NEW FILES RELEASED  
(below) for individual file numbers.

--Connect Time joins DialUnits as pricing  
options on Dialog. See HELP CONNECT for  
information.

--CLAIMS/US Patents (Files 340,341, 942) have been enhanced  
with both application and grant publication level in a  
single record. See HELP NEWS 340 for information.

\*\*\*

--SourceOne patents are now delivered to your  
email inbox as PDF replacing TIFF delivery.  
See HELP SOURCE1 for more information.

\*\*\*

--Important news for public and academic  
libraries. See HELP LIBRARY for more information.

\*\*\*

--Important Notice to Freelance Authors--  
See HELP FREELANCE for more information

\*\*\*

For information about the access to file 43 please see Help News43.

\*\*\*

NEW FILES RELEASED

\*\*\*Dialog NewsRoom - Current 3-4 months (File 990)

\*\*\*Dialog NewsRoom - 2001 Archive (File 994)

\*\*\*Dialog NewsRoom - 2000 Archive (File 995)

\*\*\*TRADEMARKSCAN-Finland (File 679)

\*\*\*TRADEMARKSCAN-Japan (File 669)

\*\*\*TRADEMARKSCAN-Norway (File 678)

\*\*\*TRADEMARKSCAN-Sweden (File 675)

\*\*\*

UPDATING RESUMED

\*\*\*Delphes European Business (File 481)

\*\*\*

RELOADED

\*\*\*U.S. Patents Fulltext 1976-current (File 654)

\*\*\*Population Demographics (File 581)

\*\*\*CLAIMS/US PATENTS (File 340, 341, 942)  
\*\*\*Kompas Western Europe (File 590)  
\*\*\*D&B - Dun's Market Identifiers (File 516)  
\*\*\*MEDLINE (File 155/154)

REMOVED

\*\*\*U.S. Patents Fulltext 1980-1989 (File 653)  
\*\*\*Washington Post (File 146)  
\*\*\*Books in Print (File 470)  
\*\*\*Court Filings (File 793)  
\*\*\*Microcomputer Software Guide Online (File 278)  
\*\*\*Publishers, Distributors & Wholesalers of the U.S. (File 450)  
\*\*\*State Tax Today (File 791)  
\*\*\*Tax Notes Today (File 790)  
\*\*\*Worldwide Tax Daily (File 792)

\*\*\*New document supplier\*\*\*

IMED has been changed to INFOTRIE (see HELP CINFOTRI)

>>>Get immediate news with Dialog's First Release  
news service. First Release updates major newswire  
databases within 15 minutes of transmission over the  
wire. First Release provides full Dialog searchability  
and full-text features. To search First Release files in  
OneSearch simply BEGIN FIRST for coverage from Dialog's  
broad spectrum of news wires.

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<  
\*\*\*\*

KWIC is set to 50.

HIGHLIGHT set on as '\*'

File 1:ERIC 1966-2002/May 10  
(c) format only 2002 The Dialog Corporation

Set	Items	Description
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Cost is in DialUnits

?b 155, 5, 73

15may02 10:33:02 User259876 Session D343.1

\$0.35 0.099 DialUnits File1

\$0.35 Estimated cost File1

\$0.03 TELNET

\$0.38 Estimated cost this search

\$0.38 Estimated total session cost 0.099 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1966-2002/May W1

**\*File 155: This file has been reloaded. Accession numbers have changed.**

File 5:BIOSIS Previews(R) 1969-2002/May W2

(c) 2002 BIOSIS

File 73:EMBASE 1974-2002/May W1

(c) 2002 Elsevier Science B.V.

**\*File 73: For information about Explode feature please  
see Help News73.**

Set	Items	Description
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?s (unpaired (w) splice (w) donor)

9887 UNPAIRED

28780 SPLICE

201405 DONOR

S1 1 (UNPAIRED (W) SPLICE (W) DONOR)

?t s1/3,k/all

1/3,K/1 (Item 1 from file: 73)  
DIALOG(P)File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

07176031 EMBASE No: 1998066892

**TKT'S plans for turning on endogenous genes**

Expert Opinion on Therapeutic Patents ( EXPERT OPIN. THER. PAT. ) (United Kingdom) 1998, 8/3 (325-328)  
CODEN: EOTPE ISSN: 1354-3776  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 7

...the targeting construct. Specifically, the targeting constructs include at least: DNA homologous to the target locus, exogenous regulatory sequences and an exogenous exon with an \*unpaired\* \*splice\* \*donor\* site. The new transcription unit is expressed from the exogenous regulatory sequences and includes most or all of the target gene's coding sequences which...

?s (unpaired (w) splice (w) donor (w) site)

9887 UNPAIRED  
28780 SPLICE  
201405 DONOR  
990714 SITE

S2 1 (UNPAIRED (W) SPLICE (W) DONOR (W) SITE)

?t s2

2/2/1 (Item 1 from file: 73)  
DIALOG(P)File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

07176031 EMBASE No: 1998066892

**TKT'S plans for turning on endogenous genes**

Expert Opinion on Therapeutic Patents ( EXPERT OPIN. THER. PAT. ) (United Kingdom) 1998, 8/3 (325-328)  
CODEN: EOTPE ISSN: 1354-3776  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH  
NUMBER OF REFERENCES: 7

**DRUG DESCRIPTORS:**

thrombopoietin; beta interferon; deoxyribonuclease i; erythropoietin; growth hormone; granulocyte macrophage colony stimulating factor; follitropin

**MEDICAL DESCRIPTORS:**

\*gene therapy; \*gene activation  
patent; gene targeting; gene construct; structural gene; reporter gene; technique; drug sensitization; cell type; human; article  
CAS REGISTRY NO.: 9014-42-0 (thrombopoietin); 9003-98-9 (deoxyribonuclease 1); 11096-26-7 (erythropoietin); 36992-73-1, 37267-05-3, 66419-50-9, 9002-72-6 (growth hormone); 9002-68-0 (follitropin)

**SECTION HEADINGS:**

022 Human Genetics  
029 Clinical and Experimental Biochemistry  
030 Clinical and Experimental Pharmacology  
037 Drug Literature Index

?s (poly(A) (w) trap) or (splice (w) acceptor (w) trap)

244 POLY(A)  
34681 TRAP  
0 POLY(A) (W) TRAP  
28780 SPLICE  
47969 ACCEPTOR  
34681 TRAP  
0 SPLICE(W)ACCEPTOR(W)TRAP

S3 0 (POLY(A) (W) TRAP) OR (SPLICE (W) ACCEPTOR (W) TRAP)

?s (gene (w) trapping (w) vector)

1833491 GENE  
 34260 TRAPPING  
 186407 VECTOR  
 S4 0 (GENE (W) TRAPPING (W) VECTOR)  
 ?s ((exon or gene) (w) trapping)  
 79887 EXON  
 1833491 GENE  
 34260 TRAPPING  
 S5 725 ((EXON OR GENE) (W) TRAPPING)  
 ?s s5 and (vector or (DNA (w) construct))  
 725 S5  
 186407 VECTOR  
 1754438 DNA  
 73917 CONSTRUCT  
 800 DNA(W)CONSTRUCT  
 S6 77 S5 AND (VECTOR OR (DNA (W) CONSTRUCT))  
 ?s s6 and (review)  
 77 S6  
 1238257 REVIEW  
 S7 1 S6 AND (REVIEW)  
 ?t s7/3,k/all

**7/3,K/1 (Item 1 from file: 73)**  
 DIALOG(R)File 73:EMBASE  
 (c) 2002 Elsevier Science B.V. All rts. reserv.

07705405 EMBASE No: 1999186719

**Cosmid-based \*exon\* \*trapping\***

den Dunnen J.T.

J.T. den Dunnen, Department of Human Genetics, Leiden University Medical Center, 2333 Al Leiden Netherlands

Methods in Enzymology ( METHODS ENZYMOL. ) (United States) 1999, 303/- (100-110)

CODEN: MENZA ISSN: 0076-6879

DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH

**Cosmid-based \*exon\* \*trapping\***

**MEDICAL DESCRIPTORS:**

\*exon; \*genetic analysis; \*cosmid \*vector\*

gene location; molecular cloning; gene insertion; gene isolation; gene library; reverse transcription polymerase chain reaction; gene amplification; nonhuman; animal cell; \*review\*; priority journal

?ds

Set	Items	Description
S1	1	(UNPAIRED (W) SPLICE (W) DONOR)
S2	1	(UNPAIRED (W) SPLICE (W) DONOR (W) SITE)
S3	0	(POLY(A) (W) TRAP) OR (SPLICE (W) ACCEPTOR (W) TRAP)
S4	0	(GENE (W) TRAPPING (W) VECTOR)
S5	725	((EXON OR GENE) (W) TRAPPING)
S6	77	S5 AND (VECTOR OR (DNA (W) CONSTRUCT))
S7	1	S6 AND (REVIEW)
?s s6 and (splice (w) donor (w) site)		
	77	S6
	28780	SPLICE
	201405	DONOR
	990714	SITE
	1467	SPLICE(W)DONOR(W)SITE
S8	3	S6 AND (SPLICE (W) DONOR (W) SITE)
?t s6/3,k/all		

**6/3,K/1 (Item 1 from file: 155)**  
 DIALOG(R)File 155:MEDLINE(R)

11330323 21391688 PMID: 11500980

8/3,K/3 (Item 1 from file: 73)  
DIALOG(R) File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

05913412 EMBASE No: 1994330015

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\***

Datson N.A.; Duyk G.M.; Van Ommen G.-J.B.; Den Dunnen J.T.  
Department of Human Genetics, Med Genetics Centre-SW Netherlands, Leiden  
University, Wassenaarseweg 72, 2333 Al Leiden Netherlands  
Nucleic Acids Research ( NUCLEIC ACIDS RES. ) (United Kingdom) 1994,  
22/20 (4148-4153)  
CODEN: NARHA ISSN: 0305-1048  
DOCUMENT TYPE: Journal; Article  
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\***

\*Exon\* \*trapping\* is a method to functionally clone expressed sequences from genomic DNA. We have previously developed the \*vector\* system pETV-SD2, which contains only a \*splice\* \*donor\* \*site\* (SD) followed by a LacZ gene, allowing trapping of internal exons of human genes by blue - white selection. We now describe the adaptation of the...

...in a strong signal from amplified 3' exons in addition to a great reduction of non-specific background. As a test for the system, 3' \*exon\* \*trapping\* was performed using a cosmid containing the alpha-globin gene cluster on chromosome 16. The 3'-terminal exons of the human alpha<sub>1</sub>-globin 1-, 2...

...region of the alpha<sub>1</sub>-globin gene. This exon appears to belong to a previously unidentified gene within the alpha-globin gene cluster. This 3' \*exon\* \*trapping\* strategy should facilitate the cloning of genes from large genomic regions.

**MEDICAL DESCRIPTORS:**

article; chromosome 16; controlled study; cosmid; dna flanking region; donor site; exon; gene amplification; gene cluster; gene isolation; cloning \*vector\*; human; human cell; nucleotide sequence; polyadenylation; polymerase chain reaction; priority journal; promoter region; reverse transcription polymerase chain reaction  
?ds

Set	Items	Description
S1	1	(UNPAIRED (W) SPLICE (W) DONOR)
S2	1	(UNPAIRED (W) SPLICE (W) DONOR (W) SITE)
S3	0	(POLY(A) (W) TRAP) OR (SPLICE (W) ACCEPTOR (W) TRAP)
S4	0	(GENE (W) TRAPPING (W) VECTOR)
S5	725	((EXON OR GENE) (W) TRAPPING)
S6	77	S5 AND (VECTOR OR (DNA (W) CONSTRUCT))
S7	1	S6 AND (REVIEW)
S8	3	S6 AND (SPLICE (W) DONOR (W) SITE)

?rd s6

...examined 50 records (50)

...completed examining records

S9 43 RD S6 (unique items)

?t s9/3,k/all

9/3,K/1 (Item 1 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

11330323 21391688 PMID: 11500980

**Sorting nexin-14, a gene expressed in motoneurons trapped by an in vitro preselection method.**

Carroll P; Renoncourt Y; Gayet O; De Bovis B; Alonso S

INSERM U.382, Developmental Biology Institute of Marseille (IBDM),  
CNRS/INSERM/Universite de la Mediterranee/AP de Marseille, Campus de  
Luminy, Marseille, France.

Developmental dynamics : an official publication of the American  
Association of Anatomists (United States) Aug 2001, 221 (4) p431-42,  
ISSN 1058-8388 Journal Code: 9201927

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

A gene-trap strategy was set up in embryonic stem (ES) cells with the aim  
of trapping genes expressed in restricted neuronal lineages. The \*vector\*  
used trap genes irrespective of their activity in undifferentiated  
totipotent ES cells. Clones were subjected individually to differentiation  
in a system in which ES cells...

... LIM-homeodomain Islet-1 in several tissues. Sorting nexins are proteins  
associated with the endoplasmic reticulum (ER) and may play a role in  
receptor trafficking. \*Gene\* \*trapping\* followed by screening based on in  
vitro preselection of differentiated ES recombinant clones, therefore, has  
the potential to identify integration events in subsets of genes...

9/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

10649329 20171376 PMID: 10704283

**Identification of 40 genes on a 1-Mb contig around the IL-4 cytokine  
family gene cluster on mouse chromosome 11.**

Wenderfer S E; Slack J P; McCluskey T S; Monaco J J

Department of Molecular Genetics, Biochemistry, and Microbiology,  
University of Cincinnati, Cincinnati, Ohio 45267-0524, USA.

Genomics (UNITED STATES) Feb 1 2000, 63 (3) p354-73, ISSN 0888-7543  
Journal Code: 8800135

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

...cytokine cluster. Genomic clones obtained by screening mouse bacterial  
artificial chromosome (BAC) and P1-derived artificial chromosome (PAC)  
libraries were subcloned into the pSPL3 expression \*vector\* and transfected  
into COS7 cells for \*exon\* \*trapping\*. In total, 118 distinct, putative  
exons were sequenced and characterized, mapping up to 29 distinct genes to  
the mouse cluster, including Il4 and Csf2. Northern...

9/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

10527811 20054088 PMID: 10585558

**\*Gene\* \*trapping\* of two novel genes, Hzf and Hhl, expressed in  
hematopoietic cells.**

Hidaka M; Caruana G; Stanford W L; Sam M; Correll P H; Bernstein A

Program in Molecular Biology and Cancer, Samuel Lunenfeld Research  
Institute, Mount Sinai Hospital, 600 University Avenue, Toronto, Canada.

Mechanisms of development (IRELAND) Jan 2000, 90 (1) p3-15, ISSN  
0925-4773 Journal Code: 9101218

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**\*Gene\* \*trapping\* of two novel genes, Hzf and Hhl, expressed in  
hematopoietic cells.**

Using an expression \*gene\* \*trapping\* strategy, we have identified and

characterized two novel hematopoietic genes, Hzf and H1. Embryonic stem (ES) cells containing a gene trap \*vector\* insertion were cultured on OP9 stromal cells to induce hematopoietic differentiation and screened for lacZ reporter gene expression. Two ES clones displaying lacZ expression within ...

9/3,K/4 (Item 4 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

10524502 20042515 PMID: 10572187

**RET: a poly A-trap retrovirus \*vector\* for reversible disruption and expression monitoring of genes in living cells.**

Ishida Y; Leder F

Department of Genetics, Harvard Medical School, Howard Hughes Medical Institute, 200 Longwood Avenue, Boston, MA 02115, USA.

Nucleic acids research (ENGLAND) Dec 15 1999, 27 (24) pe35, ISSN 1362-4962 Journal Code: 0411011

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**RET: a poly A-trap retrovirus \*vector\* for reversible disruption and expression monitoring of genes in living cells.**

\*Gene\* \*trapping\* is a form of insertional mutagenesis that causes disruption of gene function. Here we report the construction and extensive examination of a versatile retrovirus \*vector\*, RET (removable exon trap). The RET \*vector\* uses an improved poly A-trap strategy for the efficient identification of functional genes regardless of their expression status in target cells. A combination of...

... acceptor and an effective polyadenylation signal assures the complete disruption of the function of trapped genes. Inclusion of a promoterless GFP cDNA in the RET \*vector\* allows the expression pattern of the trapped gene to be easily monitored in living cells. Finally, because of loxP-containing LTRs at both ends, the...

9/3,K/5 (Item 5 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

10449882 99440754 PMID: 10512203

**Exchangeable gene trap using the Cre/mutated lox system.**

Araki K; Imaizumi T; Sekimoto T; Yoshinobu K; Yoshimuta J; Akizuki M; Miura K; Araki M; Yamamura K

Institute of Molecular Embryology and Genetics, Kumamoto University School of Medicine, Japan. yamamura@gpo.kumamoto-u.ac.jp

Cellular and molecular biology (Noisy-le-Grand, France) (FRANCE) Jul 1999, 45 (5) p737-50, ISSN 0145-5680 Journal Code: 9216789

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The gene trap technique is a powerful approach for characterizing and mutating genes involved in mouse development. However, one shortcoming of \*gene\* \*trapping\* is the relative inability to induce subtle mutations. This problem can be overcome by introducing a knock-in system into the gene trap strategy. Here, we have constructed a new gene trap \*vector\*, pU-Hachi, employing the Cre-mutated lox system (Araki et al., 1997), in which a pair of mutant lox, lox71 and lox66, was used to...

... by Cre recombinase. The pU-Hachi carries splicing acceptor (SA)-lox71-internal ribosomal entry site (IRES)-beta-geo-pA-loxP-pA-pUC. By using this \*vector\*, we can carry out random insertional mutagenesis as the first step, and then we can replace the beta-geo gene with any gene of interest...

... 109 trap clones electroporated with pU-Hachi, and analyzed their integration patterns by Southern blotting to select those carrying a single copy of the trap \*vector\*. By use of some of these clones, we have succeeded in exchanging the reporter gene at high efficiency, ranging between 30-80%. This integration system is also quite useful for plasmid rescue to recover flanking genomic sequences, because a plasmid \*vector\* sequence can be introduced even when the pUC sequence of the trap \*vector\* is lost through integration into the genome. Thus, this method, termed exchangeable \*gene\* \*trapping\*, has many advantages as the trapped clones can be utilized to express genes with any type of mutation.

9/3,K/6 (Item 6 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

10407660 99400433 PMID: 10471385

**Identification of a differentially expressed RNA helicase by \*gene\* \*trapping\*.**

Wagner D S; Gan L; Klein W H  
Department of Biochemistry and Molecular Biology, University of Texas M. D. Anderson Cancer Center, Houston, Texas, 77030, USA.  
Biochemical and biophysical research communications (UNITED STATES) Sep 7 1999, 262 (3) p677-84, ISSN 0006-291X Journal Code: 0372516  
Contract/Grant No.: CA16672; CA; NCI; HD22619; HD; NICHD  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

**Identification of a differentially expressed RNA helicase by \*gene\* \*trapping\*.**

... was seen within the developing eyes, limbs, heart, neural tube, and skeleton. Two transcripts were cloned that contained endogenous sequences fused to the gene trap \*vector\* sequence. Analysis of the endogenous sequences revealed that the reporter integrated within a gene belonging to a small group of eukaryotic superfamily I helicases. Unexpectedly...

9/3,K/7 (Item 7 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

09877596 98289805 PMID: 9626503

**Disruption of murine alpha-enolase by a retroviral gene trap results in early embryonic lethality.**

Couldrey C; Carlton M B; Ferrier J; Colledge W H; Evans M J  
Department of Physiology, University of Cambridge, United Kingdom.  
Developmental dynamics : an official publication of the American Association of Anatomists (UNITED STATES) Jun 1998, 212 (2) p284-92, ISSN 1058-8388 Journal Code: 9201927  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

\*Gene\* \*trapping\* with the retroviral ROSA beta geo \*vector\* was used to generate lines of mice carrying disrupted genes. Both cDNA and genomic flanks have been cloned from a number of these lines. One mutation has been shown to disrupt the alpha-enolase gene by insertion of the splice-trap \*vector\* into the first intron. In adult mice, lacZ expression was detected only in testes. Embryonic expression was detected from 10.5-day postcoitum embryos and...

9/3,K/8 (Item 8 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)



09639509 98044331 PMID: 9382807

**\*Gene\* \*trapping\* with GFP: the isolation of developmental mutants in the slime mold Polysphondylium.**

Fey P; Cox E C

Department of Molecular Biology, Princeton University, New Jersey 08544, USA.

Current biology : CB (ENGLAND) Nov 1 1997, 7 (11) p909-12, ISSN 0960-9822 Journal Code: 9107782

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**\*Gene\* \*trapping\* with GFP: the isolation of developmental mutants in the slime mold Polysphondylium.**

... combines restriction enzyme-mediated integration (REMI) [1,2] and green fluorescent protein (GFP) [3] expression. In REMI, a restriction enzyme is electroporated along with linearized \*vector\* into cells, thus determining the site of plasmid insertion and often increasing the integration frequency. A set of transforming plasmids carrying the GFP coding sequence...

9/3,K/9 (Item 9 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

09601945 98024199 PMID: 9356517

**Efficient gene tagging in Arabidopsis thaliana using a gene trap approach.**

Babiychuk E; Fuangthong M; Van Montagu M; Inze D; Kushnir S

Laboratorium voor Genetica, Departement Genetica, Vlaams Interuniversitair Instituut voor Biotechnologie (VIB), Universiteit Gent, B-9000 Gent, Belgium.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Nov 11 1997, 94 (23) p12722-7, ISSN 0027-8424 Journal Code: 7505876

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... Here we describe a gene trap construct that allowed us to disrupt transcribed genes with a high efficiency in Arabidopsis thaliana. In the T-DNA \*vector\* used, the expression of a bacterial reporter gene coding for neomycin phosphotransferase II (nptII) depends on the in vivo generation of a translation fusion upon...

... binding protein, ATP-binding cassette transporter, and five proteins of unknown function. Four tagged genes were new for Arabidopsis. The results presented here suggest that \*gene\* \*trapping\*, using nptII as a reporter gene, can be as high as 80% and opens novel perspectives for systematic gene tagging in A. thaliana.

9/3,K/10 (Item 10 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

09356520 97268648 PMID: 9108056

**Disruption of overlapping transcripts in the ROSA beta geo 26 gene trap strain leads to widespread expression of beta-galactosidase in mouse embryos and hematopoietic cells.**

Zambrowicz B P; Imamoto A; Fliering S; Herzenberg L A; Kerr W G; Soriano P  
Division of Basic Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA 98109, USA.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Apr 15 1997, 94 (8) p3789-94, ISSN 0027-8424

Journal Code: 7505876  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

The ROSA beta geo26 (ROSA26) mouse strain was produced by random retroviral \*gene\* \*trapping\* in embryonic stem cells. Staining of ROSA26 tissues and fluorescence-activated cell sorter-Gal analysis of hematopoietic cells demonstrates ubiquitous expression of the proviral beta geo reporter gene, and bone marrow transfer experiments illustrate the general utility of this strain for chimera and transplantation studies. The gene trap \*vector\* has integrated into a region that produces three transcripts. Two transcripts, lost in ROSA26 homozygous animals, originate from a common promoter and share identical 5...

9/3,K/11 (Item 11 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

09333255 97228906 PMID: 9074932

**Rapid sequence analysis of gene trap integrations to generate a resource of insertional mutations in mice.**

Townley D J; Avery B J; Rosen B; Skarnes W C  
Biotechnology and Biological Sciences Research Council (BBSRC),  
University of Edinburgh, UK.

Genome research (UNITED STATES) Mar 1997, 7 (3) p293-8, ISSN  
1088-9051 Journal Code: 9518021

Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

\*Gene\* \*trapping\* in murine embryonic stem cells is a proven method for the simultaneous identification and mutation of genes in the mouse. Gene trap vectors are designed...

... products. More than 150 independent gene trap cell lines were analyzed, and sequence information was obtained for every line successfully amplified by RACE. With the \*vector\* used in this study, 40% of the cell lines were found to contain properly spliced gene trap events. The remaining lines were either spliced inefficiently or contained deletions of the \*vector\*. These results highlight the advantage of sequencing gene trap integrations before further characterization. This work now paves the way for large-scale gene trap screens...

9/3,K/12 (Item 12 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

08994857 96354903 PMID: 8769410

**\*Gene\* \*trapping\* in differentiating cell lines: regulation of the lysosomal protease cathepsin B in skeletal myoblast growth and fusion.**

Gogos J A; Thompson R; Lowry W; Sloane B F; Weintraub H; Horwitz M  
Howard Hughes Medical Institute, Fred Hutchinson Cancer Research Center,  
Seattle, Washington 98109, USA. gogosj@rockvax.rockefeller.edu

Journal of cell biology (UNITED STATES) Aug 1996, 134 (4) p837-47,  
ISSN 0021-9525 Journal Code: 0375356

Contract/Grant No.: CA 36481; CA; NCI; HD01080-03; HD; NICHD  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

\*Gene\* \*trapping\* in differentiating cell lines: regulation of the lysosomal protease cathepsin B in skeletal myoblast growth and fusion.

... we have infected mouse C2C12 myoblasts with retroviral gene trap vectors, containing a promoterless marker gene with a 5' splice acceptor signal. Integration of the \*vector\* adjacent to an actively transcribed gene places the marker under the transcriptional control of the endogenous gene, while the adjacent \*vector\* sequences facilitate cloning. The \*vector\* insertionally mutates the trapped locus and may also form fusion proteins with the endogenous gene product. We have screened several hundred clones, each containing a trapping \*vector\* integrated into a different endogenous gene. In agreement with previous estimates based on hybridization kinetics, we find that a large proportion of all genes expressed...

9/3,K/13 (Item 13 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

08930564 96305352 PMID: 8688464

**Sequence and expression pattern of an evolutionarily conserved transcript identified by \*gene\* \*trapping\*.**

Rijkers T; Ruther U  
Medizinische Hochschule Hannover, Institut fur Molekularbiologie, Germany.

Biochimica et biophysica acta (NETHERLANDS) Jul 17 1996, 1307 (3)  
p294-300, ISSN 0006-3002 Journal Code: 0217513

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Sequence and expression pattern of an evolutionarily conserved transcript identified by \*gene\* \*trapping\*.**

We have isolated and analysed embryonic stem (ES) cell clones after electroporation with a gene trap \*vector\*. Clones were screened for changes in their lacZ reporter gene activity upon in vitro differentiation. The cDNA of one of the trapped transcripts, T10-2A2...

9/3,K/14 (Item 14 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

08837651 96184861 PMID: 8604345

**Scanning for genes in large genomic regions: cosmid-based \*exon\* \*trapping\* of multiple exons in a single product.**

Datson N A; van de Vosse E; Dauwerse H G; Bout M; van Ommen G J; den Dunnen J T

Department of Human Genetics, Leiden University, The Netherlands.

Nucleic acids research (ENGLAND) Mar 15 1996, 24 (6) p1105-11,

ISSN 0305-1048 Journal Code: 0411011

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Scanning for genes in large genomic regions: cosmid-based \*exon\* \*trapping\* of multiple exons in a single product.**

To facilitate the scanning of large genomic regions for the presence of exonic gene segments we have constructed a cosmid-based exon trap \*vector\*. The \*vector\* serves a dual purpose since it is also suitable for contig construction and physical mapping. The exon trap cassette of \*vector\* sCOGH1 consists of the human growth hormone gene driven by the mouse metallothionein-1 promoter. Inserts are cloned in the multicloning site located in intron...

9/3,K/15 (Item 15 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

08670057 96000071 PMID: 7580924

**Identification of 3'-terminal exons from yeast artificial chromosomes.**

Krizman D B; Hofmann T A; DeSilva U; Green E D; Meltzer P S; Trent J M  
Laboratory of Cancer Genetics, National Center for Human Genome Research,  
National Institutes of Health, Bethesda, Maryland 20892, USA.

PCR methods and applications (UNITED STATES) Jun 1995, 4 (6) p322-6,  
ISSN 1054-9803 Journal Code: 9201445

Contract/Grant No.: P50-HG00201; HG; NHGRI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

We report an extension of 3'-terminal \*exon\* \*trapping\* technology to the identification of transcribed sequences from yeast artificial chromosomes (YACs). A 350-kb YAC containing mouse genomic DNA was gel-purified and used as the target DNA for the 3'-terminal \*exon\* \*trapping\* strategy. A novel direct ligation/transfection approach was employed to increase the efficiency of trapping 3'-terminal exons from recombinant \*vector\*-derived chimeric mRNA. The resulting RT-PCR product was then used to generate a plasmid library. Randomly chosen individual subclones from this library were sequenced...

9/3,K/16 (Item 16 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

08634867 95394353 PMID: 7665076

**Increased \*exon\*-\*trapping\* efficiency through modifications to the pSPL3 splicing \*vector\*.**

Burn T C; Connors T D; Klinger K W; Landes G M

Department of Human Genetics, Integrated Genetics Inc., Framingham, MA  
01701-9332, USA.

Gene (NETHERLANDS) Aug 19 1995, 161 (2) p183-7, ISSN 0378-1119  
Journal Code: 7706761

Contract/Grant No.: RO1 DK44853; DK; NIDDK

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Increased \*exon\*-\*trapping\* efficiency through modifications to the pSPL3 splicing \*vector\*.**

\*Exon\* \*trapping\* allows for the rapid identification and cloning of coding regions from cloned eukaryotic DNA. In preliminary experiments, we observed two phenomena which limited the \*exon\*-\*trapping\* efficiency of pSPL3-based systems. The first factor that affected performance was revealed when we found that up to 50% of the putative trapped exons contained sequences derived from the intron of the pSPL3 trapping \*vector\*. Removal of the DNA sequences responsible for the cryptic splice event from the original splicing \*vector\* resulted in a new \*vector\*, pSPL3B. We demonstrate that pSPL3B virtually eliminates pSPL3-only spliced products while maximizing the proportion of exon traps containing genomic DNA (> 98%). The other step...

... observation that a majority of the ampicillin-resistant (APR) clones produced after shotgun subcloning from ApR cosmid into pSPL3 were untrappable, pSPL3-deficient, recircularized cosmid \*vector\* fragments. Replacement of the pSPL3 ApR gene with the CmR cassette encoding chloramphenicol (Cm) acetyltransferase enabled selection for only pSPL3-containing CmR clones. We show a 30-40-fold increase in the initial subcloning efficiency of cosmid-derived fragments with pSPL3-CAM, when compared to pSPL3. The collective \*vector\* alterations described improve the overall \*exon\*-\*trapping\* efficiency of the pSPL3-based trapping system.

9/3,K/17 (Item 17 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

08265282 95023183 PMID: 7937140

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\*.**

Datson N A; Duyk G M; Van Ommen J B; Den Dunnen J T  
Department of Human Genetics, Leiden University, The Netherlands.  
Nucleic acids research (ENGLAND) Oct 11 1994, 22 (20) p4148-53,  
ISSN 0305-1048 Journal Code: 0411011  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\*.**

\*Exon\* \*trapping\* is a method to functionally clone expressed sequences from genomic DNA. We have previously developed the \*vector\* system pETV-SD2, which contains only a splice donor site (SD) followed by a LacZ gene, allowing trapping of internal exons of human genes by...

... in a strong signal from amplified 3' exons in addition to a great reduction of non-specific background. As a test for the system, 3' \*exon\* \*trapping\* was performed using a cosmid containing the alpha-globin gene cluster on chromosome 16. The 3'-terminal exons of the human alpha 1-, zeta 2...

... region of the alpha 1-globin gene. This exon appears to belong to a previously unidentified gene within the alpha-globin gene cluster. This 3' \*exon\* \*trapping\* strategy should facilitate the cloning of genes from large genomic regions.

9/3,K/18 (Item 18 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

08175154 94309890 PMID: 8036002

**Exon amplification from complete libraries of genomic DNA using a novel phage \*vector\* with automatic plasmid excision facility: application to the mouse neurofibromatosis-1 locus.**

Nehls M; Pfeifer D; Boehm T  
Department of Medicine 1, University of Freiburg, Germany.  
Oncogene (ENGLAND) Aug 1994, 9 (8) p2169-75, ISSN 0950-9232  
Journal Code: 8711562  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

**Exon amplification from complete libraries of genomic DNA using a novel phage \*vector\* with automatic plasmid excision facility: application to the mouse neurofibromatosis-1 locus.**

... in the vicinity of chromosomal lesions found in tumours is an essential step in the identification of new oncogenes. Here, we describe a lambda phage \*vector\* system for genomic \*exon\*-\*trapping\* (lambda GET), which dramatically simplifies the task of exon amplification from genomic DNA. The \*vector\* accommodates about 6.5 to 19 kb of DNA and allows inserts to be automatically subcloned as multi-copy plasmids containing splice donor and acceptor...

9/3,K/19 (Item 19 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

07782156 93307516 PMID: 7686513

An **\*exon\*--trapping\*** system with a newly constructed trapping **\*vector\*** pEXT2; its application to the proximal region of the human chromosome 21 long arm.

Ozawa N; Kano T; Taga C; Hattori M; Sakaki Y; Suzuki H  
Shionogi Institute for Medical Science, Osaka, Japan.

FEBS letters (NETHERLANDS) Jul 5 1993, 325 (3) p303-8, ISSN 0014-5793 Journal Code: 0155157

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

An **\*exon\*--trapping\*** system with a newly constructed trapping **\*vector\*** pEXT2; its application to the proximal region of the human chromosome 21 long arm.

We have developed an **\*exon\*--trapping\*** system with a newly constructed trapping **\*vector\*** containing multiple cloning sites (designated pEXT2). The system revealed high sensitivity for trapping a control exon from several hundred kbp of DNA. We have applied...

9/3,K/20 (Item 20 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

07504226 93028546 PMID: 1409698

**Establishment of a highly sensitive and specific \*exon\*--trapping\* system.**

Hamaguchi M; Sakamoto H; Tsuruta H; Sasaki H; Muto T; Sugimura T; Terada M

Genetics Division, National Cancer Center Research Institute, Tokyo, Japan.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Oct 15 1992, 89 (20) p9779-83, ISSN 0027-8424 Journal Code: 7505876

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Establishment of a highly sensitive and specific \*exon\*--trapping\* system.**

We have established a highly sensitive and specific **\*exon\*--trapping\*** system (SETS) with a specific plasmid **\*vector\*** in which an exon in a given DNA segment is identified by its ability to remain as a mature mRNA after splicing. The SETS provides...

... from DNA fragments in chromosomal regions of more than 300 kilobase pairs. Genomic DNA fragments were partially digested and subsequently cloned into plasmid pMHC2, an **\*exon\*--trapping\*** **\*vector\*** we have constructed. These constructs were transfected into COS-7 cells, and consequent RNA transcripts were spliced in the cells. The resulting mature mRNA was harvested and amplified by using reverse transcription-PCR. Possible exons can be recognized by the sizes of PCR products and cloned into a plasmid **\*vector\***. The SETS provides a direct means of cloning exons from genomic DNA of more than 300 kilobase pairs within a short period of time. Using...

9/3,K/21 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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13360364 BIOSIS NO.: 200100567513

**Gene trap construct for identification and isolation of genes.**

AUTHOR: Von Melchner Harald(a); Holzer Dieter

AUTHOR ADDRESS: (a)Univ. St. Klinikum, Abteilung Hamatologie,  
Theodor-Stern-Kai 7, D-60596 Frankfurt\*\*Germany  
JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1251 (3):pNo Pagination Oct. 16, 2001  
MEDIUM: e-file  
ISSN: 0098-1133  
DOCUMENT TYPE: Patent  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: The invention under consideration concerns a \*gene\*--\*trapping\*  
construct containing a first reporter gene which after activation can  
activate a second reporter gene, and the use of this \*gene\*--\*trapping\*  
construct for identification and isolation of genes, especially genes  
transiently expressed. The invention under consideration furthermore  
concerns a cell, preferably a mammalian cell, containing the  
abovementioned \*gene\*--\*trapping\* construct. The invention under  
consideration in addition concerns the use of this mammalian cell for  
identification and/or isolation of genes, particularly transient genes.  
Furthermore the invention concerns a \*vector\* containing the  
abovementioned \*gene\*--\*trapping\* construct, as well as a kit for  
identification and/or isolation of genes, especially transient genes,  
that contains at least the abovementioned \*gene\*--\*trapping\* construct or  
the abovementioned \*vector\*. In conclusion, the invention under  
consideration concerns a process for identification and/or isolation of  
genes, particularly transient genes.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: \*gene\*--\*trapping\* construct...

9/3,K/22 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

13100344 BIOSIS NO.: 200100307493

**A gene trap \*vector\* system for identifying transcriptionally responsive genes.**

AUTHOR: Medico Enzo(a); Gambarotta Giovanna; Gentile Alessandra; Comoglio  
Paolo M; Soriano Philippe  
AUTHOR ADDRESS: (a)Institute for Cancer Research and Treatment, University  
of Torino School of Medicine, 10060, Candiolo: emedico@ircc.unito.it\*\*  
Italy  
JOURNAL: Nature Biotechnology 19 (6):p579-582 June, 2001  
MEDIUM: print  
ISSN: 1087-0156  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

**A gene trap \*vector\* system for identifying transcriptionally responsive genes.**

ABSTRACT: We present a method for fast and efficient trapping of genes  
whose transcription is regulated by exogenous stimuli. We constructed a  
promoterless retroviral \*vector\* transducing a green fluorescent  
protein-nitroreductase (GFNR) fusion protein down-stream from a splice  
acceptor site. Flow cytometric analysis of the infected population allows  
identification...

DESCRIPTORS:

...ORGANISMS: gene \*vector\*  
...METHODS & EQUIPMENT: gene trap \*vector\* system...

...\*gene\* \*trapping\*--

9/3,K/23 (Item 3 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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12493178 BIOSIS NO.: 200000246680

**Gene trap insertional mutagenesis in mice: New vectors and germ Line mutations in two novel genes.**

AUTHOR: Neilan Edward G; Barsh Gregory S(a)  
AUTHOR ADDRESS: (a)Stanford University School of Medicine, B-271 Beckman Center, Stanford, CA, 94305\*\*USA  
JOURNAL: Transgenic Research 8 (6):p451-458 Dec., 1999  
ISSN: 0962-8819  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

...ABSTRACT: We report a set of plasmid-encoded gene trap vectors and the disruption of two novel genes. Our results include a comparison of the relative \*gene\* \*trapping\* efficiencies of two different splice acceptor sequences in ES cells and an analysis of the structure of several gene trap insertions.  
...METHODS & EQUIPMENT: gene expression/\*vector\* techniques, genetic method...

9/3,K/24 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

12161207 BIOSIS NO.: 199900456056

**Molecular analysis of rice plants harboring an Ac/Ds transposable element-mediated \*gene\* \*trapping\* system.**

AUTHOR: Chin Hang Gyeong; Choe Mi Sook; Lee Sung-Ho; Park Sung Han; Park Su Hyun; Koo Ja Choon; Kim No Youl; Lee Jeung Joo; Oh Byeong Geun; Yi Gi Hwan; Kim Soon Chul; Choi Hae Chune; Cho Moo Je; Han Chang-deok(a)  
AUTHOR ADDRESS: (a)Plant Molecular Biology and Biotechnology Research Center (PMBBRC), Department of Molecular Biology, National University, Chinju, 660-701\*\*South Korea  
JOURNAL: Plant Journal 19 (5):p615-623 Sept., 1999  
ISSN: 0960-7412  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

**Molecular analysis of rice plants harboring an Ac/Ds transposable element-mediated \*gene\* \*trapping\* system.**

DESCRIPTORS:  
...ORGANISMS: transformation \*vector\*  
CHEMICALS & BIOCHEMICALS: ...\*gene\* \*trapping\* system  
METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/25 (Item 5 from file: 5)  
DIALOG(F)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

12161179 BIOSIS NO.: 199900456028

**Cosmid-based \*exon\* \*trapping\*.**

BOOK TITLE: Methods in Enzymology; cDNA preparation and characterization  
AUTHOR: den Dunnen Johan T(a)  
BOOK AUTHOR/EDITOR: Weissman S M: Ed  
AUTHOR ADDRESS: (a)Department of Human Genetics, Leiden University Medical Center, 2333 Al, Leiden\*\*Netherlands  
JOURNAL: Methods in Enzymology 303p100-110 1999



BOOK PUBLISHER: Academic Press, Inc., 1250 Sixth Ave., San Diego,  
California 92101, USA  
Academic Press Ltd., 14 Belgrave Square, 24-28 Oval Road,  
London NW1 7DX, England, UK  
ISSN: 0076-6879 ISBN: 0-12-182204-4  
DOCUMENT TYPE: Book  
RECORD TYPE: Citation  
LANGUAGE: English

**Cosmid-based \*exon\* \*trapping\*.**

METHODS & EQUIPMENT: cosmid-based \*exon\* \*trapping\*--...

...gene expression/\*vector\* techniques, molecular genetic method, protocol  
...

...gene expression/\*vector\* techniques, molecular genetic method, protocol

**9/3,K/26 (Item 6 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

12150796 BIOSIS NO.: 199900445645

**\*Gene\* \*trapping\* in mouse embryonic stem cells.**

**BOOK TITLE: Methods in Molecular Biology; Molecular embryology: Methods and protocols**

AUTHOR: Brennan Jane(a); Skarnes William C

BOOK AUTHOR/EDITOR: Sharpe P T; Mason I: Eds

AUTHOR ADDRESS: (a)BBSRC Centre for Genome Research, University of  
Edinburgh, Edinburgh\*\*UK

JOURNAL: Methods in Molecular Biology 97p123-138 1999

BOOK PUBLISHER: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa,  
New Jersey 07512, USA

ISSN: 0097-0816 ISBN: 0-89603-387-2

DOCUMENT TYPE: Book

RECORD TYPE: Citation

LANGUAGE: English

**\*Gene\* \*trapping\* in mouse embryonic stem cells.**

...METHODS & EQUIPMENT: gene expression/\*vector\* techniques...

...\*gene\* \*trapping\*--

**9/3,K/27 (Item 7 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

12067939 BIOSIS NO.: 199900362788

**An avian sarcoma/leukosis virus-based gene trap \*vector\* for mammalian cells.**

AUTHOR: Zheng Xiangqun H; Hughes Stephen H(a)

AUTHOR ADDRESS: (a)NCI-Frederick Cancer Research and Development Center,  
Bldg. 539, Frederick, MD, 21702-1201\*\*USA

JOURNAL: Journal of Virology 73 (8):p6946-6952 Aug., 1999

ISSN: 0022-538X

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

SUMMARY LANGUAGE: English

**An avian sarcoma/leukosis virus-based gene trap \*vector\* for mammalian cells.**

ABSTRACT: FCASBP-M2C is a retroviral \*vector\* derived from an avian  
sarcoma/leukosis virus which has been modified so that it uses the

envelope gene from an aphotropic murine leukemia virus (L. V. Barsov and S. H. Hughes, J. Virol. 70:3922-3929, 1996). The \*vector\* replicates efficiently in avian cells and infects, but does not replicate in, mammalian cells. This makes the \*vector\* useful for gene delivery, mutagenesis, and other applications in mammalian systems. Here we describe the development of a derivative of RCASBP-M2C, pGT-GFP, that can be used in gene trap experiments in mammalian cells. The gene trap \*vector\* pGT-GFP contains a green fluorescent protein (GFP) reporter gene. Appropriate insertion of the \*vector\* into genes causes GFP expression; this facilitates the rapid enrichment and cloning of the trapped cells and provides an opportunity to select subpopulations of trapped cells based on the subcellular localization of GFP. With this \*vector\*, we have generated about 90 gene-trapped lines using D17 and NIH 3T3 cells. Five trapped NIH 3T3 lines were selected based on the distribution...

DESCRIPTORS:

...ORGANISMS: gene trap \*vector\*; ...

...gene trap \*vector\*

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/28 (Item 8 from file: 5)

DIALOG(R)File 5:Biosis Previews(F)

(c) 2002 BIOSIS. All rts. reserv.

11739377 BIOSIS NO.: 199800520073

**\*Exon\* \*trapping\*.**

**BOOK TITLE: Genome Analysis: A laboratory manual, Vol 2; Detecting genes**

AUTHOR: Krizman David B(a)

BOOK AUTHOR/EDITOR: Birren B; Green E D; Klapholz S; Myers R M; Roskams J: Eds

AUTHOR ADDRESS: (a)Natl. Cancer Inst., NIH, Bethesda, MD\*\*USA

p191-216 1998

BOOK PUBLISHER: Cold Spring Harbor Laboratory Press, 10 Skyline Drive, Plainview, New York 11803, USA

ISBN: 0-87969-511-0 (paper); 0-87969-510-2 (cloth)

DOCUMENT TYPE: Book

RECORD TYPE: Citation

LANGUAGE: English

**\*Exon\* \*trapping\*.**

...METHODS & EQUIPMENT: \*exon\* \*trapping\*--...

...internal \*exon\* \*trapping\* using pSFL3...

...molecular genetic method, protocol, plasmid \*vector\* techniques...

...3'-terminal \*exon\* \*trapping\*--

9/3,K/29 (Item 9 from file: 5)

DIALOG(R)File 5:Biosis Previews(F)

(c) 2002 BIOSIS. All rts. reserv.

11537376 BIOSIS NO.: 199800318708

**Bodenin: A novel murine gene expressed in restricted areas of the brain.**

AUTHOR: Faisst Anja M; Gruss Peter(a)

AUTHOR ADDRESS: (a)Dep. Molecular Cell Biol., Max Planck Inst. Biophysical Chem., Am Fassberg 11, D-37077 Goettinge\*\*Germany

JOURNAL: Developmental Dynamics 212 (2):p293-303 June, 1998

ISSN: 1058-8388

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: may also be due to functional compensation or to the

production of low level of wild-type protein in mice homozygous for the gene trap \*vector\* insertion. Nevertheless, the restricted expression of bodenin in the brain of newborn and adult mice suggests a role for this novel gene in the developing...

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/30 (Item 10 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2002 BIOSIS. All rts. reserv.

11537374 BIOSIS NO.: 199800318706

**Disruption of genes regulated during hematopoietic differentiation of mouse embryonic stem cells.**

AUTHOR: Muth Katrin; Bruyns Regina; Thorey Irmgard S; Von Melchner Harald  
(a)

AUTHOR ADDRESS: (a)Lab. Molecular Hematol., Dep. Hematol., Univ. Frankfurt  
Med. Sch., Theodor-Stern-Kai 7, 60590, F\*\*Germany

JOURNAL: Developmental Dynamics 212 (2):p277-283 June, 1998

ISSN: 1058-8388

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A retroviral gene trap \*vector\* (U3Tkneo) that selects for integrations in or near expressed 5' exons has been used to identify genes that are repressed during hematopoietic differentiation of mouse totipotent embryonic stem cells. The \*vector\* contains coding sequences for an HSV-thymidine kinase/neomycin phosphotransferase fusion protein in the U3 region of a Moloney murine leukemia virus LTR and allows...

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/31 (Item 11 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2002 BIOSIS. All rts. reserv.

11537373 BIOSIS NO.: 199800318705

**Gene trap integrations expressed in the developing heart: Insertion site affects splicing of the PT1-ATG \*vector\*.**

AUTHOR: McClive Peter; Fall Gurman; Newton Kathryn; Lee Muriel; Mullins John; Forrester Lesley(a)

AUTHOR ADDRESS: (a)Centre Genome Res., Univ. Edinburgh, Kings Build., West  
Mains Road, Edinburgh EH9 3JQ\*\*UK

JOURNAL: Developmental Dynamics 212 (2):p267-276 June, 1998

ISSN: 1058-8388

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

**Gene trap integrations expressed in the developing heart: Insertion site affects splicing of the PT1-ATG \*vector\*.**

...ABSTRACT: gene is repressed by retinoic acid (RA) in vitro and is expressed in the developing heart in vivo. In one of these, the gene trap \*vector\* has integrated into a gene that is located on chromosome 17 and is homologous to the human transcription factor gene, TFEB. Embryonic and adult cardiac...

...was confirmed. However, we show that the integration has not resulted in a null allele, because wild type transcripts, possibly resulting from splicing around the \*vector\*, are observed in homozygous tissue. The other two cardiac-expressing gene trap integrations have occurred into exons on chromosomes 1 and 5 and have used cryptic donor sites within the \*vector\* to generate functional fusion transcripts. One of these exon integrations results in a lethal neonatal phenotype.

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

MISCELLANEOUS TERMS: 1-ATG gene \*vector\*--

9/3,K/32 (Item 12 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

11537371 BIOSIS NO.: 199800318703

**Crouzon-like craniofacial dysmorphism in the mouse is caused by an insertional mutation at the Fgf3/Fgf4 locus.**

AUTHOR: Carlton Mark B L(a); Colledge William H; Evans Martin J  
AUTHOR ADDRESS: (a)Wellcome Trust, Cancer Res. Campaign, Inst. Cancer  
Developmental Biol., Dep. Genetics, Univ. Cam\*\*UK  
JOURNAL: Developmental Dynamics 212 (2):p242-249 June, 1998  
ISSN: 1058-8388  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

...ABSTRACT: sutures (craniosynostosis). These features provide a murine phenocopy for a large class of human craniofacial dysmorphism syndromes associated with craniosynostosis, particularly Crouzon syndrome. The retroviral \*vector\* integration responsible for the Bey mutation is inserted in the intragenic region between Fgf3 and Fgf4. Transcript analysis demonstrates that expression of both Fgf3 and...

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/33 (Item 13 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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11537370 BIOSIS NO.: 199800318702

**Dmdmdx-betageo: A new allele for the mouse dystrophin gene.**

AUTHOR: Wertz Karin(a); Fuechtbauer Ernst-Martin  
AUTHOR ADDRESS: (a)Max-Planck-Institut fuer Immunbiologie, Stuebeweg 51,  
D-79108 Freiburg\*\*Germany  
JOURNAL: Developmental Dynamics 212 (2):p229-241 June, 1998  
ISSN: 1058-8388  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

ABSTRACT: During a gene trap screen, an insertion of the gene trap \*vector\* into the dystrophin gene, creating a new allele for the Dmd gene, has been discovered. Because the ROSAbetageo \*vector\* was used, the new allele is called Dmdmdx-betageo. The insertion occurred 3' of exon 63 of the dystrophin gene, resulting in a mutation that...

METHODS & EQUIPMENT: \*gene\* \*trapping\*--

9/3,K/34 (Item 14 from file: 5)  
DIALOG(P)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

11534857 BIOSIS NO.: 199800316189

**Gene trap expression and mutational analysis for genes involved in the development of the mammalian nervous system.**

AUTHOR: Stoykova A; Chowdhury K; Bonaldo P; Torres M; Gruss P(a)  
AUTHOR ADDRESS: (a)Dep. Molecular Cell Biol., Max Planck Inst. Biophysical  
Chem., Am Fassberg 11, D-37077 Goettinge\*\*Germany  
JOURNAL: Developmental Dynamics 212 (2):p198-213 June, 1998  
ISSN: 1058-8388  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

METHODS & EQUIPMENT: \*gene\* \*trapping\*--  
MISCELLANEOUS TERMS: ...internal ribosomal entry site-beta-geo \*vector\*  
----

...gene \*vector\*

**9/3,K/35 (Item 15 from file: 5)**

DIALOG(F)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

10724174 BIOSIS NO.: 199799345319

**Isolation of coding sequences from yeast artificial chromosome (Yac):  
Clones by exon amplification.**

**BOOK TITLE: Methods in Molecular Biology; PCR cloning protocols: From  
molecular cloning to genetic engineering**

AUTHOR: Gibson Fernando; Brown Steve D M

BOOK AUTHOR/EDITOR: White B A: Ed

AUTHOR ADDRESS: Dep. Biochem., St. Mary's Hosp. Med. Sch., London\*\*UK

JOURNAL: Methods in Molecular Biology 67p301-313 1997

BOOK PUBLISHER: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa,  
New Jersey 07512, USA

ISSN: 0097-0816 ISBN: 0-89603-343-0; 3-13-103691-5

RECORD TYPE: Citation

LANGUAGE: English

MISCELLANEOUS TERMS: ...DNA \*VECTOR\*; ...

...\*EXON\* \*TRAPPING\*;

**9/3,K/36 (Item 16 from file: 5)**

DIALOG(F)File 5:Biosis Previews(F)  
(c) 2002 BIOSIS. All rts. reserv.

10117734 BIOSIS NO.: 199698572652

**Trapping internal and 3'-terminal exons.**

**BOOK TITLE: PCR primer: A laboratory manual**

AUTHOR: Nisson Paul E(a); Ally Abdul(a); Watkins Paul C

BOOK AUTHOR/EDITOR: Dieffenbach C W; Dveksler G S: Eds

AUTHOR ADDRESS: (a)Life Technol. Inc., Gaithersburg, MD 20877\*\*USA  
p345-369 1995

BOOK PUBLISHER: Cold Spring Harbor Laboratory Press, 10 Skyline Drive,  
Plainview, New York 11803, USA

ISBN: 0-87969-447-5

DOCUMENT TYPE: Book

RECORD TYPE: Citation

LANGUAGE: English

MISCELLANEOUS TERMS: ...\*EXON\*-\*TRAPPING\* \*VECTOR\*;

**9/3,K/37 (Item 17 from file: 5)**

DIALOG(P)File 5:Biosis Previews(P)  
(c) 2002 BIOSIS. All rts. reserv.

08819202 BIOSIS NO.: 199395108553

**Correction of BA 95027487. Establishment of a highly sensitive and specific  
\*exon\*-\*trapping\* system. Correction of publication year from 1922.**

AUTHOR: Hamaguchi Masaaki; Sakamoto Hiromi(a); Tsuruta Hiroyuki(a); Sasaki  
Hiroyuki(a); Muto Tetsuichiro; Sugimara Takashi(a); Terada Masaaki(a)

AUTHOR ADDRESS: (a)Genetics Div., Natl. Cancer Cent. Res. Inst., 1-1,  
Tsukiji 5-chome, Chuo-ku, Tokyo 104\*\*Japan

JOURNAL: Proceedings of the National Academy of Sciences of the United  
States of America 89 (20):p9779-9783 1992

ISSN: 0027-8424  
DOCUMENT TYPE: Article; Erratum  
RECORD TYPE: Abstract  
LANGUAGE: English

**Correction of BA 95027487. Establishment of a highly sensitive and specific \*exon\*-trapping\* system. Correction of publication year from 1922.**

ABSTRACT: We have established a highly sensitive and specific \*exon\*-trapping\* system (SETS) with a specific plasmid \*vector\* in which an exon in a given DNA segment is identified by its ability to remain as a mature mRNA after splicing. The SETS provides...  
...from DNA fragments in chromosomal regions of more than 300 kilobase pairs. Genomic DNA fragments were partially digested and subsequently cloned into plasmid pMHC2, an \*exon\*-trapping\* \*vector\* we have constructed. These constructs were transfected into COS-7 cells, and consequent RNA transcripts were spliced in the cells. The resulting mature mRNA was harvested and amplified by using reverse transcription-PCR. Possible exons can be recognized by the sizes of PCR products and cloned into a plasmid \*vector\*. The SETS provides a direct means of cloning exons from genomic DNA of more than 300 kilobase pairs within a short period of time. Using...

9/3,K/38 (Item 18 from file: 5)  
DIALOG(R)File 5:Biosis Previews(F)  
(c) 2002 BIOSIS. All rts. reserv.

08472139 BIOSIS NO.: 199344022139

**Searching for expressed sequences: \*Exon\* \*trapping\*.**

AUTHOR: Datson N A(a); Duyk G M; Blonden L A J; Den Dunnen J T(a); Van Ommen G J B(a)

AUTHOR ADDRESS: (a)Dep. Human Genetics, Leiden Univ.\*\*Netherlands

JOURNAL: American Journal of Human Genetics 51 (4 SUPPL.):pA8 1992

CONFERENCE/MEETING: 42nd Annual Meeting of the American Society of Human Genetics, San Francisco, California, USA, November 9-13, 1992. AM J HUM GENET

ISSN: 0002-9297

RECORD TYPE: Citation

LANGUAGE: English

**Searching for expressed sequences: \*Exon\* \*trapping\*.**

MISCELLANEOUS TERMS: ...\*VECTOR\* PETV-SD2

9/3,K/39 (Item 19 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

06858926 BIOSIS NO.: 000038020452

**\*EXON\* \*TRAPPING\* A GENETIC SCREEN FOR CODING SEQUENCES WITHIN CLONED ANONYMOUS GENOMIC DNA**

AUTHOR: DUYK G M; PETERSON A; KIM S; MYERS R M; COX D R

AUTHOR ADDRESS: UNIV. CALIF., SAN FRANCISCO, CA, USA.

JOURNAL: 40TH ANNUAL MEETING OF THE AMERICAN SOCIETY OF HUMAN GENETICS, BALTIMORE, MARYLAND, USA, NOVEMBER 11-15, 1989. AM J HUM GENET 45 (4 SUPPL.). 1989. A184. 1989

CODEN: AJHGA

DOCUMENT TYPE: Meeting

RECORD TYPE: Citation

LANGUAGE: ENGLISH

**\*EXON\* \*TRAPPING\* A GENETIC SCREEN FOR CODING SEQUENCES WITHIN CLONED ANONYMOUS GENOMIC DNA**

DESCRIPTORS: ABSTRACT RAT RETROVIRAL SHUTTLE \*VECTOR\* SYSTEM GENETIC ENGINEERING

9/3,K/40 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

11132173 EMBASE No: 2001131433

**Mice with a homozygous gene trap \*vector\* insertion in mgcRacGAP die during pre-implantation development**

Van de Putte T.; Zwijsen A.; Lonnoy O.; Rybin V.; Cozijnsen M.; Francis A.; Baekelandt V.; Kozak C.A.; Zerial M.; Huylebroeck D.

D. Huylebroeck, Department of Cell Growth, Flanders Interuniversity, Institute for Biotechnology, Herestraat 49, 3000 Leuven Belgium

AUTHOR EMAIL: danny.huylebroeck@med.kuleuven.ac.be

Mechanisms of Development ( MECH. DEV. ) (Ireland) 2001, 102/1-2 (33-44)

CODEN: MEDVE ISSN: 0925-4773

PUBLISHER ITEM IDENTIFIER: S0925477301002799

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 54

**Mice with a homozygous gene trap \*vector\* insertion in mgcRacGAP die during pre-implantation development**

MEDICAL TERMS (UNCONTROLLED): \*gene\* \*trapping\*

9/3,K/41 (Item 2 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

11055302 EMBASE No: 2000406179

**\*Gene\* \*trapping\* methods for the identification and functional analysis of cell surface proteins in mice**

Skarnes W.C.

Methods in Enzymology ( METHODS ENZYMOL. ) (United States) 2000, 328/- (592-615)

CODEN: MENZA ISSN: 0076-6879

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 32

**\*Gene\* \*trapping\* methods for the identification and functional analysis of cell surface proteins in mice**

MEDICAL DESCRIPTORS:

gene function; protein analysis; stem cell; gene targeting; gene sequence; expression \*vector\*; human; nonhuman; mouse; article; priority journal

9/3,K/42 (Item 3 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2002 Elsevier Science B.V. All rts. reserv.

05392658 EMBASE No: 1993160757

**The \*exon\* \*trapping\* assay partly discriminates against alternatively spliced exons**

Andreadis A.; Nisson P.E.; Kosik K.S.; Watkins P.C.

Dept. Neurology (Neuroscience), Harvard Med. Schl Ctr. Neurol. Dis., Brigham and Women's Hospital, Boston, MA 02115 United States

Nucleic Acids Research ( NUCLEIC ACIDS RES. ) (United Kingdom) 1993, 21/9 (2217-2221)

CODEN: NARHA ISSN: 0305-1048

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

**The \*exon\* \*trapping\* assay partly discriminates against alternatively**

## spliced exons

A cosmid containing eight exons of the gene coding for the microtubule-associated tau protein was subjected to the \*exon\* \*trapping\* assay. All the constitutive exons contained in the cosmid (4, 5, 7 and 9) were efficiently captured regardless of size. Of the four alternatively spliced...

### MEDICAL DESCRIPTORS:

analytic method; article; assay; cosmid; dna sequence; gene amplification; genetic transfection; cloning \*vector\*; human; human cell; molecular cloning; polymerase chain reaction; priority journal; restriction mapping

MEDICAL TERMS (UNCONTROLLED): \*exon\* \*trapping\*

9/3,K/43 (Item 4 from file: 73)

DIALOG(R) File 73:EMBASE

(c) 2002 Elsevier Science B.V. All rts. reserv.

04518647 EMBASE No: 1991012689

### **\*Exon\* \*trapping\*: A genetic screen to identify candidate transcribed sequences in cloned mammalian genomic DNA**

Duyk G.M.; Kim S.; Myers R.M.; Cox D.R.

HSE 1556, University of California, Box 0554, 513 Parnassus Avenue, San Francisco, CA 94143 United States

Proceedings of the National Academy of Sciences of the United States of America ( PROC. NATL. ACAD. SCI. U. S. A. ) (United States) 1990, 87/22 (8995-8999)

CODEN: PNAS ISSN: 0027-8424

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

### **\*Exon\* \*trapping\*: A genetic screen to identify candidate transcribed sequences in cloned mammalian genomic DNA**

...their chromosomal location. We have developed a strategy that facilitates the recovery of exons from random pieces of cloned genomic DNA. The basis of this '\*exon\* \*trapping\*' strategy is that, during a retroviral life cycle, genomic sequences of nonviral origin are correctly spliced and may be recovered as a cDNA copy of...

### MEDICAL DESCRIPTORS:

\*dna transcription; \*retrovirus; \*rna splicing; \*virus \*vector\*  
?ds

Set	Items	Description
S1	1	(UNPAIRED (W) SPLICE (W) DONOR)
S2	1	(UNPAIRED (W) SPLICE (W) DONOR (W) SITE)
S3	0	(POLY(A) (W) TRAP) OR (SPLICE (W) ACCEPTOR (W) TRAP)
S4	0	(GENE (W) TRAPPING (W) VECTOR)
S5	725	((EXON OR GENE) (W) TRAPPING)
S6	77	S5 AND (VECTOR OR (DNA (W) CONSTRUCT))
S7	1	S6 AND (REVIEW)
S8	3	S6 AND (SPLICE (W) DONOR (W) SITE)
S9	43	RD S6 (unique items)

?logoff

15may02 10:44:43 User259876 Session D343.2

\$3.34 1.045 DialUnits File155

\$8.61 41 Type(s) in Format 3

\$8.61 41 Types

\$11.95 Estimated cost File155

\$5.33 0.951 DialUnits File5

\$98.00 56 Type(s) in Format 3

\$98.00 56 Types

\$103.33 Estimated cost File5

\$7.63 0.848 DialUnits File73

\$2.50 1 Type(s) in Format 2

\$70.00 28 Type(s) in Format 3



\$72.50 29 Typ  
\$80.13 Estimated cost File73  
OneSearch, 3 files, 2.843 DialUnits FileOS  
\$2.60 TELNET  
\$198.01 Estimated cost this search  
\$198.39 Estimated total session cost 2.942 DialUnits

### Status: Signed Off. (12 minutes)

S6 77 S5 AND (VECTOR OR (DNA (W) CONSTRUCT))  
S7 1 S6 AND (REVIEW)  
S8 3 S6 AND (SPLICE (W) DONOR (W) SITE)  
?t s8/3,k/all

8/3,K/1 (Item 1 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)

08265282 95023183 PMID: 7937140

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\*.**

Datson N A; Duyk G M; Van Ommen J B; Den Dunnen J T  
Department of Human Genetics, Leiden University, The Netherlands.  
Nucleic acids research (ENGLAND) Oct 11 1994, 22 (20) p4148-53;

ISSN 0305-1048 Journal Code: 0411011

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Specific isolation of 3'-terminal exons of human genes by \*exon\*  
\*trapping\*.**

\*Exon\* \*trapping\* is a method to functionally clone expressed sequences from genomic DNA. We have previously developed the \*vector\* system pETV-SD2, which contains only a \*splice\* \*donor\* \*site\* (SD) followed by a LacZ gene, allowing trapping of internal exons of human genes by blue-white selection. We now describe the adaptation of the...

... in a strong signal from amplified 3' exons in addition to a great reduction of non-specific background. As a test for the system, 3' \*exon\* \*trapping\* was performed using a cosmid containing the alpha-globin gene cluster on chromosome 16. The 3'-terminal exons of the human alpha 1-, zeta 2...

... region of the alpha 1-globin gene. This exon appears to belong to a previously unidentified gene within the alpha-globin gene cluster. This 3' \*exon\* \*trapping\* strategy should facilitate the cloning of genes from large genomic regions.

8/3,K/2 (Item 1 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
(c) 2002 BIOSIS. All rts. reserv.

09580004 BIOSIS NO.: 199598034922

**Specific isolation of 3'-terminal exons of human genes by \*exon\* \*trapping\***

AUTHOR: Datson Nicole A; Duyk Geoffrey M; Van Ommen Gert-Jan B; Den Dunnen Johan T(a)

AUTHOR ADDRESS: (a)Dep. Human Genetics, Med. Genetics Cent.-South West  
Netherlands, Leiden Univ., Wassenaarseweg 72\*\*Netherlands

JOURNAL: Nucleic Acids Research 22 (20):p4148-4153 1994

ISSN: 0305-1048

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

**Specific isolation of 3'-terminal exons of human genes by \*exon\* \*trapping\***

ABSTRACT: \*Exon\* \*trapping\* is a method to functionally clone expressed sequences from genomic DNA. We have previously developed the \*vector\* system pETV-SD2, which contains only a \*splice\* \*donor\* \*site\* (SD) followed by a LacZ gene, allowing trapping of internal exons of human genes by blue - white selection. We now describe the adaptation of the...

MISCELLANEOUS TERMS: ...\*SPLICE\* \*DONOR\* \*SITE\*;

**Establishment of a highly sensitive and specific \*exon\*-trapping\* system**

Hamaguchi M.; Sakamoto H.; Tsuruta H.; Sasaki H.; Muto T.; Sugimura T.;  
Terada M.

Genetics Division, National Cancer Ctr. Research Inst., 1-1, Tsukiji  
5-chome, Chuo-ku, Tokyo 104 Japan

Proceedings of the National Academy of Sciences of the United States of  
America ( PROC. NATL. ACAD. SCI. U. S. A. ) (United States) 1992, 89/20  
(9779-9783)

CODEN: PNASA ISSN: 0027-8424

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

**Establishment of a highly sensitive and specific \*exon\*-trapping\* system**

We have established a highly sensitive and specific \*exon\*-trapping\*  
system (SETS) with a specific plasmid \*vector\* in which an exon in a given  
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splicing. The SETS provides...

...from DNA fragments in chromosomal regions of more than 300 kilobase  
pairs. Genomic DNA fragments were partially digested and subsequently  
cloned into plasmid pMHC2, an \*exon\*-trapping\* \*vector\* we have  
constructed. These constructs were transfected into COS-7 cells, and  
consequent RNA transcripts were spliced in the cells. The resulting mature  
mRNA was harvested and amplified by using reverse transcription-PCR.  
Possible exons can be recognized by the sizes of PCR products and cloned  
into a plasmid \*vector\*. The SETS provides a direct means of cloning exons  
from genomic DNA of more than 300 kilobase pairs within a short period of  
time. Using...

**6/3,K/77 (Item 21 from file: 73)**

DIALOG(R) File 73:EMBASE

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04518647 EMBASE No: 1991012689

**\*Exon\* trapping\*: A genetic screen to identify candidate transcribed  
sequences in cloned mammalian genomic DNA**

Duyk G.M.; Kim S.; Myers R.M.; Cox D.R.

HSE 1556, University of California, Box 0554, 513 Parnassus Avenue, San  
Francisco, CA 94143 United States

Proceedings of the National Academy of Sciences of the United States of  
America ( PROC. NATL. ACAD. SCI. U. S. A. ) (United States) 1990, 87/22  
(8995-8999)

CODEN: PNASA ISSN: 0027-8424

DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

**\*Exon\* trapping\*: A genetic screen to identify candidate transcribed  
sequences in cloned mammalian genomic DNA**

...their chromosomal location. We have developed a strategy that  
facilitates the recovery of exons from random pieces of cloned genomic DNA.  
The basis of this '\*exon\* trapping\*' strategy is that, during a retroviral  
life cycle, genomic sequences of nonviral origin are correctly spliced and  
may be recovered as a cDNA copy of...

MEDICAL DESCRIPTORS:

\*dna transcription; \*retrovirus; \*rna splicing; \*virus \*vector\*

?ds

Set	Items	Description
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S4	0	(GENE (W) TRAPPING (W) VECTOR)
S5	725	((EXON OR GENE) (W) TRAPPING)